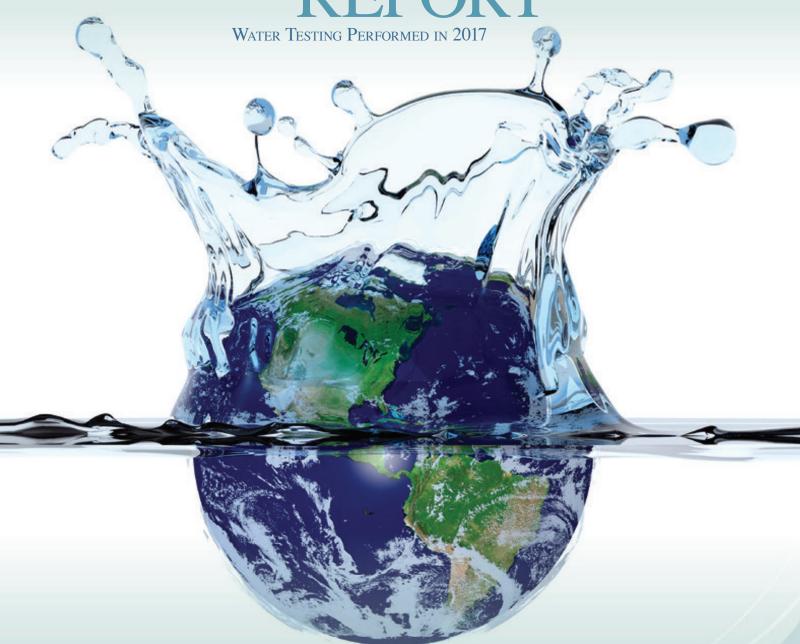
ANNUAL WATER OUALITY REPORT



BEAUMONT

Presented By

City of Beaumont Water Utilities

Quality First

Once again, we are pleased to present our annual water quality report. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This water supply is responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Important Health Information

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people

with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines

on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at (800) 426-4791.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it can acquire naturally occurring minerals, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact our business office. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Public Meetings

The Water Utilities Department is part of the City Government and follows not only Federal and State regulations but also ordinances established by City Council. The City Council normally meets each Tuesday at City Hall, 801 Main Street, Beaumont, Texas 77704, at 1:30 p.m., or you may contact the Council Members at (409) 880-3770. You are invited to participate in our public forum and to voice your concerns about our drinking water.

Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank.
 Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Where Does My Water Come From?

The City of Beaumont has two sources of water: 1) Well water is pumped from the Chicot Aquifer at three different well sites located in Hardin County and 2) surface water from the Neches River, with three separate intakes located at various spots upriver from Beaumont. Well water is chlorinated before it is pumped to the City. Surface water receives a more complex

treatment, including filtration and chlorination. The City of Beaumont inspects and analyzes both sources of water daily to ensure compliance with all federal and state requirements. The water plant is operated 24 hours a day, 7

days a week to give you the best-quality water possible.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. Sometimes the City has water line breaks. When they occur, the color comes from iron and mineral deposits inside the pipe that become dislodged. After the water line is repaired, the water will clear and you may run your faucet to clear the discolored water in your home's pipes. To report a water line break, please call 311.

Water treatment is a complex, time-consuming process.

Water Loss Audit

In the water loss audit submitted to the Texas Water Development Board during the year covered by this report, our system lost an estimated 1,614,659,242 gallons of water. If you have any questions about the water loss audit, please call Water Utilities at (409) 866-0026.

QUESTIONS?

For questions about the information in this report, please contact Mr. John Pippins III, Water Utilities Designer III, at (409) 785-4702.



Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The information in the data tables represents only those substances that were detected. The State recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

egulatory standards to		e drinkin	g water qual	ity. Contac	t us for i	more infor	nation on thi	is progr	am.					
REGULATED SUBSTA	ANCES	VEAD		01	1401.0	AMOUNT								
SUBSTANCE YEAR (UNIT OF MEASURE) SAMPLE		SAMPLED	MCL [MRDL]		MCLG [MRDLG]	AMOUNT RANGE DETECTED LOW-HIGH		VIO	LATION	I TYPICAL	SOURCE			
Atrazine (ppb) 2017		3		3	0.10	0.10-0.10)	No	Runoff	from herbicide used	on row crops			
Barium (ppm) 2017		2		2	0.19	0.111-0.1	9	No	Dischar	Discharge of drilling wastes; Discharge from metal refineries; Erosion of na				
Chlorine (ppm) 2017		2017	[4]		[4]	2.72	0.05-5.40)	No	Water a	Water additive used to control microbes			
Chromium (ppb) 2017		2017	100		100	39.2	<0.01–39.	2	No	Dischar	Discharge from steel and pulp mills; Erosion of natural deposits			
Combined Radium (pCi/L) 2017		2017	5		0	1.5	1.5–1.5		No	Erosion	Erosion of natural deposits			
C yanide (ppb)		2017	200		200	30	<0.01–30		No	Discha	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories			
Fluoride (ppm) 2017		2017	4		4	0.63	0.55-0.63	3	No	Erosion from fe	Erosion of natural deposits; Water additive that promotes strong teeth; Discharg from fertilizer and aluminum factories			
Haloacetic Acids [HAA] (ppb) 2017		2017	60		NA	23.7	<6.0–34.0)	No	By-pro	By-product of drinking water disinfection			
Nitrate (ppm) 2017		2017	10		10	0.1	<0.01-0.1	l	No		Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits $% \left\{ 1,2,,2,\right\}$			
TTHMs [Total 201] Trihalomethanes] (ppb)		2017	}	30	NA	38.7	14.0–83.0)	No	By-pro	By-product of drinking water disinfection			
Total Organic Carbon (ppm)		2017	TT		NA	2.77	1.79–3.76	5	No	Natura	Naturally present in the environment			
Turbidity ² (NTU)		2017	Г	ТТ		0.91	0.00-0.91		No	Soil rui	Soil runoff			
Turbidity (Lowest monthly percent of samples meeting limit)		2017	TT = 95% of samples meet the limit		NA	99.81	NA		No	Soil rui	Soil runoff			
ap water samples were col	lected for l	ead and copp	er analyses fron	n sample sites	throughout	the communit	у							
SUBSTANCE UNIT OF MEASURE)			AL MCLG			JNT DETECTE OTH%TILE)		SITES ABOVE AL/ TOTAL SITES		OLATION	TYPICAL SOURCE			
Copper (ppm)	2	2015	1.3	1.3	0.18		0/5	0/51		No	Corrosion of household plumbing systems; Erosion of natural deposits			
Lead (ppb) 2015		2015	15	0		1.52	1.52 0/51		No		Corrosion of household plumbing systems; Erosion of natural deposits			
SECONDARY SUBST	ANCES													
SUBSTANCE (UNIT OF MEASURE)	YE. SAMI		SCL	MCLG	DETEC		RANGE LOW-HIGH	VIOLAT	ION	TYPICAL SO	URCE			
Aluminum (ppb)	20	17	200	NA	3,1	85 2	880–3,490	No	•		on of natural deposits; Residual from some surface water treatment processes			
Copper (ppm)	20		1.0	NA	6.1		.117–12.1	No			•	hold plumbing systems; Erosion of natural deposits		
Manganese (ppb) 2017		.,	50	NA	1,5	20	020–1,520)–1,520 No		Leaching 1	Leaching from natural deposits			
UNREGULATED SUE	BSTANCE	S 3												
SUBSTANCE YEAR (UNIT OF MEASURE) SAMPLED					AMOUNT DETECTED			RANG LOW-HI			TYPICAL SOURCE			
Chloromethane (ppb)			2017			3.4			<2.0		-4.8	Disinfection by-product		
Sodium (ppm)			2017			78.45			40.9–116		-116	Erosion of natural deposits		

UNREGULATED CONTAMINANT MONITORING RULE - PART 3 (UCMR3) 3								
SUBSTANCE (UNIT OF MEASURE)			RANGE LOW-HIGH	TYPICAL SOURCE				
Molybdenum (ppb)	2014	34	0.30-74	Runoff leaching from natural deposits and/or industrial sources				
Strontium (ppb)	2014	1.3	1.0-3.0	Runoff leaching from natural deposits and/or industrial sources				

¹ Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. ² Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

Definitions

AL (**Action Level**): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

LRAA (**Locational Running Annual Average**): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal):

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SCL (Secondary Constituent Level): SCLs are established to regulate the aesthetics of drinking water like appearance, taste and odor.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

Source Water Assessment

Assessment Plan (SWAP) is available at our office. This plan is an assessment of the delineated area around our listed water sources through which contaminates, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area, and a determination of the water supplies' susceptibility to contamination by the identified potential sources.

The results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detection of these contaminants will be found in this annual report. Anyone wishing to review the study may call (409) 866-0026.

SYSTEM SUSCEPTIBILITY SUMMARY											
ASBESTO	S CYAN	NIDE M	ETALS MI	MICROBIAL MINERALS		RADIOCHEMICAL	SYTHETIC ORGANIC CHEMICALS	DISINFECTION BYPRODUCT	VOLATILE ORGANIC CHEMICALS	DRINKING WATER CONTAMINANT CANDIDATE	OTHER
MEDIU	M MED	MEDIUM HIGH HIGH HIGH		HIGH	HIGH	MEDIUM	MEDIUM	HIGH	MEDIUM		
ENTRY POINT SUSCEPTIBILITY SUMMARY											
ENTRY POINT ID	ASBESTOS CYANIDE		METALS MICROBIAL		MINERALS	RADIOCHEMICAL	SYTHETIC ORGANIC CHEMICALS	DISINFECTION BYPRODUCT	VOLATILE ORGANIC CHEMICALS	DRINKING WATER CONTAMINANT CANDIDATE	OTHER
001	MEDIUM	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	MEDIUM	MEDIUM	HIGH	MEDIUM
002	MEDIUM	MEDIUM	HIGH	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH

³ Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.